

Specifications for Mechanical Cleaning of ABAR Vacuum Furnace Water Cooled Jacket per National Board of Boiler Inspectors, NB-23:

Provide custom cleaning of two water cooling jackets for two vacuum heat treatment furnaces located in bldg. 1148 Rm.104. The cleaning shall be performed by experienced ASME certified welders to cut into the jackets and weld into place multiple clean out access ports (minimum of 5) to facilitate the cleaning and future cleanings. The welding shall be performed to ASME section 9 and comply with existing pressure vessel codes as per the National Board of Boiler and Pressure Vessel Inspectors (NBBPV) NB-23. No chemicals shall be used to flush out sediments, mechanical removal only.

Upon completion of chamber flushing, install covers for the clean outs, set the water cooling system pressure to comply with the Maximum Allowable Working Pressure (MAWP) as indicated for each chamber. All peripheral systems shall be back flushed as well such as the transformer circuit, vacuum system, gas fan cooling circuits. All removed debris, sediment, sludge and deposits shall be stored in government provided waste disposal drums. The captured materials will be disposed of by the facility personnel.

A desired delivery/completion date would be to have both systems completed before 5/30/2013.

Technical Specifics:

MAWP Jacket Only

ABAR II: 15 Psi at 200 degrees f

ABAR III: 12 Psi at 300 degrees f

Year Manufactured:

ABAR II: 1973

ABAR III: 1981

National BD Number:

ABAR II: 1085

ABAR III: 619